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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,224	08/01/2001	Matthias Breuer	30014200-1007	5926

58328 7590 01/29/2009

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ART UNIT	PAPER NUMBER
2178	

MAIL DATE	DELIVERY MODE
01/29/2009	PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BREUER MATHIAS

Appeal 2008-3259
Application 09/921,224
Technology Center 2100

Decided: January 29, 2009

Before JOHN C. MARTIN, ST. JOHN COURTENAY III, and CAROLYN D. THOMAS, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-18. We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM IN PART. We also enter new grounds of rejection for claims 11-17 under the provisions of 37 C.F.R. § 41.50 (b).

INVENTION

The invention on appeal is directed generally to the input of data into an electronic document comprising cells. More particularly, Appellant's invention is directed to the input of data into spreadsheet documents (Spec. 1).

ILLUSTRATIVE CLAIMS

Claims 1 and 7, which further illustrate the invention, follow:

1. A method in a data processing system for enabling a user to input data into a document comprising cells arranged in columns and rows, a first of the cells and a second of the cells each having an original content, the method comprising the steps of:

overriding without deleting the original content of the first cell with a first user inputted value, the first cell keeping the original content of the first cell in the first cell while the original content of the first cell is overridden;

recalculating the cells based on the first user inputted value;

after recalculating the cells based on the first user imputed value, overriding without deleting the original content of the second cell with a second user inputted value, the second cell keeping the original content of the second cell in the second cell while the original content of the second cell is overridden;

recalculating the cells based on the second user inputted value; and

automatically restoring the original content of the first cell based on a user input such that the second user inputted value is maintained in the second cell.

7. A method in a data processing system comprising a document with cells arranged in rows and columns, each cell comprising a formula and a last result, the method comprising the steps of:

receiving a plurality of values for a plurality of the cells; and

storing the values in the last result of the plurality of the cells such that the values are used during recalculation instead of the formulas and such that each of the formulas for the plurality of the cells can be restored independently of other of the plurality of cells.

Our understanding of this claim is that the recited "recalculation" refers to recalculation in cells containing formulas that refer to the plurality of cells whose received values are being used instead of their formulas. Spec. at 10, ll. 6-9.

PRIOR ART

The Examiner relies upon the following references as evidence in support of the rejections:

Kanai	US 5,339,410	Aug. 16, 1994
Bhansali	US 6,006,239	Dec. 21, 1999
Sorge	US 6,691,281 B1	Feb. 10, 2004
Zellweger	US 6,185,582 B1	Feb. 6, 2001

THE REJECTIONS

Claims 1-6 and 8-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Kanai and Bhansali.

Claims 7, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Sorge, Zellweger, and Bhansali.

GROUPING OF CLAIMS

Appellant argues independent claims 1, 8, and 11 as a group (App. Br. 6-8). For dependent claims 2-6, 9-10, and 12-16, Appellant states that these claims are allowable for at least the same reason that claims 1, 8, and 11 are allowable (App. Br. 8). Therefore, we select claim 1 as the representative claim for this group and we treat claims 2-6 and 8-16 as standing or falling with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(vii). We consider independent claims 7, 17, and 18 separately.

APPELLANT'S CONTENTIONS

Regarding the Examiner's rejection of independent claims 1, 8, and 11, Appellant contends that the combination of Kanai and Bhansali does not teach or suggest overriding without deleting an original content of a cell and automatically restoring the original content of the cell after multiple recalculations (App. Br. 6-8).

Regarding the Examiner's rejection of independent claims 7 and 17, Appellant contends that the combination of Sorge, Zellweger, and Bhansali does not teach a cell comprising a formula and a last result, wherein the value stored in the last result is used to recalculate that cell instead of the formula (App. Br. 8-10).

Regarding the Examiner's rejection of independent claim 18, Appellant contends that the combination of Sorge, Zellweger, and Bhansali does not teach or suggest temporarily overriding the content of a cell and recalculating the cell using a value instead of the cell's formula (App. Br. 10).

EXAMINER'S RESPONSE

Regarding Appellant's arguments directed to independent claims 1, 8, and 11, the Examiner contends that Appellant's claims do not require that cell values remain unmodified upon inputting data into the first cell (Ans. 9). Regarding the claimed "automatically restoring the original content" (claim 1), the Examiner notes that Bhansali teaches an undo capability that performs this function (Ans. 10).

Regarding Appellant's arguments directed to independent claims 7 and 17, the Examiner contends that Sorge teaches a cell comprising a formula and a last result. The Examiner points to column 4, lines 10-20 and column 6, lines 5-37 of Sorge as providing this teaching (Ans. 10).

Regarding Appellant's arguments directed to independent claim 18, the Examiner contends that Sorge teaches temporarily overriding the formula so that the numerical value is used instead of the formula, pointing to column 4, lines 9-37 of Sorge (Ans. 10-11). The Examiner also points to Bhansali's undo feature (Ans. 9, ¶ 1).

ISSUES

Based upon our review of the administrative record, we have determined that the following issues are dispositive in this appeal:

ISSUE 1

Has Appellant shown error in the Examiner's finding that the combination of Kanai and Bhansali teaches and/or suggests overriding, without deleting, an original content of a cell and also automatically restoring the original content of the cell based on a user input, as recited in claims 1, 8, and 11?

ISSUE 2

Has Appellant shown error in the Examiner's finding that the combination of Sorge, Zellweger, and Bhansali teaches and/or suggests a cell comprising a formula and a last result, wherein the value stored in the last result is used for recalculation instead of the formula, as recited in claims 7 and 17?

ISSUE 3

Has Appellant shown error in the Examiner's finding that the combination of Sorge, Zellweger, and Bhansali teaches and/or suggests storing a numerical value that temporarily overrides a formula in a cell so that the numerical value is used instead of the cell's formula during recalculation, as recited in claim 18?

PRINCIPLES OF LAW

"What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under *§ 103*." *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1742 (2007). To be nonobvious, an improvement must be

"more than the predictable use of prior art elements according to their established functions." *Id.* at 1740.

During prosecution, "the PTO gives claims their 'broadest reasonable interpretation.'" *In re Bigio*, 381 F.3d 1320, 1324 (Fed. Cir. 2004) (quoting *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000)).

FINDINGS OF FACT

In our analysis *infra*, we rely on the following findings of fact (FF) that are supported by a preponderance of the evidence:

THE KANAI REFERENCE

1. Kanai teaches writing a new (changed) value to a cell in a spreadsheet program and performing a recalculation using a predetermined function (col. 4, ll. 15-24).

THE BHANSALI REFERENCE

2. Bhansali teaches an undo feature that implements an inverse action associated with a previous edit (col. 11, ll. 45-67). An inverse action can include, for example, restoring deleted data values (col. 12, ll. 4-7).

THE SORGE REFERENCE

3. Sorge teaches an directly publishing a data table or chart from a spreadsheet program into an HTML document, from which the published data can be imported back into the parent spreadsheet program without loss of functionality, where it can be modified for republication in the HTML document (Abstract; *see also* col. 6, ll. 5-21).

4. Sorge teaches that formulas retain their functionality after publication from the spreadsheet to the HTML document (col. 4, ll. 11-19).

THE ZELLWEGER REFERENCE

5. Zellweger teaches first and second cells in a spreadsheet program (col. 5, ll. 21-27).

ANALYSIS

At the outset, we consider Appellant's arguments only to the extent that such arguments are directed to the claimed subject matter.

ISSUE 1

We decide the question whether Appellant has shown error in the Examiner's finding that the combination of Kanai and Bhansali teaches and/or suggests overriding, without deleting, an original content of a cell and also automatically restoring the original content of the cell based on a user input, as recited in claims 1, 8, and 11.

Before addressing the references, it is necessary to discuss the meaning of the term "original content" in claim 1. We do not agree with Appellant's view that this term refers to the value stored in a cell. *See* Br. 7 ("Nowhere does *Kanai* suggest that its cell values are overridden without being deleted."). Such an interpretation, which appears to be shared by the Examiner, is at odds with Appellant's disclosure as filed, which indicates that an original, calculated cell value is deleted when it is replaced by a manually input value. The only original information in the cell that is retained when a user manually replaces an original (i.e., previous) value with

a new value is the formula; the "final result" in the cell is changed from the original value to the new value. *See* Spec. 9:26-33 ("In the example illustrated in Fig. 5, the computer program receives, from the user, an inputted value '4', which the computer program 280 directly enters into cell 'B1'. Entry of the inputted value into cell 'B1', however, does not replace the formula 540 already present in cell 'B1' because the computer program 280 stores the inputted value '4' as the last result 542 of cell 'B1'.").

Thus, the original value is not stored in the cell or anywhere else. Instead, it is recalculated in the event the user wants to restore it. *See id.* at 11:5-8 ("The user can then select an option to restore the original content of a particular cell (step 750). If the user selects this option, the computer program 280 automatically restores the original content of the particular cell by recalculating the last result based on the formula in the cell and storing that new result in the last result (step 760).").

Because all of Appellant's arguments against the rejection of claims 1, 8, and 11 are based on incorrectly construing the term "original content" to mean the original cell value, we are summarily sustaining the rejection of those claims and their dependent claims for obviousness over the applied prior art.

However, in the interest of completeness, we are also addressing the merits of the rejection assuming, for the sake of argument, that Appellant is correct to construe the term "original content" to mean the original cell value.

We begin our analysis of the references by noting that Kanai teaches writing a new (changed) value to a cell in a spreadsheet program and also performing a recalculation using a predetermined function (FF 1). Appellant

contends that Kanai has no mention of keeping a previous value in a cell (as required to restore the original content of a cell) (App. Br. 7, ¶2, last sentence). However, we note that the Examiner's rejection is based on the *combination* of Kanai and Bhansali. As acknowledged by Appellant (App. Br. 8, ¶1), Bhansali teaches an undo feature that implements an inverse action associated with an edit (App. Br. 8, ¶ 1; *see also* FF 2). Nevertheless, Appellant contends that the secondary Bhansali reference maintains the original content of a cell in a disk undo log, instead of *in the cell itself* (App. Br. 8, ¶ 2, emphasis added). Therefore, we continue our analysis by considering the scope of the claimed "cell."

As a matter of claim construction, we broadly but reasonably interpret the recited "cell" as encompassing not only the visible spreadsheet cell displayed to the user, but also including all storage locations associated with the visible spreadsheet cell. This construction is fully consistent with Appellant's Specification as shown in Figure 4 and as described at page 8, lines 20-24. Also, lines 7-11 at page 2 of the Specification explain that the formulas "are shown directly in the cells for the sake of simplicity." Given this construction, we conclude that the broad language of representative claim 1 does not preclude storing information associated with a visible spreadsheet cell in one or more storage locations that are separate from the visible spreadsheet cell itself.

We note that Bhansali teaches one or more storage locations (i.e., a disk undo log) that are used to effect an undo operation, including restoring deleted data values (FF 2). Given Bhansali's teaching of an undo operation, we find that the combination of Kanai and Bhansali would have suggested overriding cell content without deleting the cell's original value. We also find that Bhansali's undo operation reasonably teaches and/or suggests automatically restoring the original value of the displayed cell based on a user input. Therefore, we find the weight of the evidence before us supports the Examiner's legal conclusion of obviousness.

Because Appellant has not shown the Examiner erred, we sustain the Examiner's rejection of representative claim 1, and claims 2-6 and 8-16 which fall therewith, as being unpatentable over the combination of Kanai and Bhansali.

ISSUE 2

We decide the question whether Appellant has shown error in the Examiner's finding that the combination of Sorge, Zellweger, and Bhansali teaches and/or suggests a cell comprising a formula and a last result, wherein the value stored in the last result portion of a cell is used for recalculation instead of the formula, as recited in claims 7 and 17.

In reviewing the evidence before us, we note that Sorge teaches directly publishing a data table or chart from a spreadsheet program into an HTML document where the published data can be imported back into the parent spreadsheet program (FF 3). The secondary Zellweger reference teaches first and second cells in a spreadsheet program (FF 5). The tertiary Bhansali reference teaches an undo feature, as previously discussed (FF 2).

We have reviewed the Examiner's response on page 10 of the Answer regarding the purported teachings of the references. However, the Examiner has not established that the proffered combination of Sorge, Zellweger, and Bhansali fairly teaches and/or suggests a cell comprising a formula and *a last result*, wherein the value stored in the *last result* is used for recalculation *instead of the formula*, as required by the language of independent claim 7 and the equivalent language of independent claim 17. Accordingly, we reverse the Examiner's rejection of claims 7 and 17 as being unpatentable over the combination of Sorge, Zellweger, and Bhansali.

ISSUE 3

We decide the question whether Appellant has shown error in the Examiner's finding that the combination of Sorge, Zellweger, and Bhansali teaches and/or suggests storing a numerical value that temporarily overrides a formula in a cell so that the numerical value is used instead of the cell's formula during recalculation, as recited in claim 18.

Appellant states that Sorge instead "teaches overwriting and deleting a spreadsheet cell's contents, including its formula, with a value and a formula from an HTML document" (App. Br. 10). However, we note that the tertiary Bhansali reference teaches an undo operation, as previously discussed (FF 2). Again, we note that the Examiner's rejection is based on the *combination* of the references. Nevertheless, we agree with Appellant that overwriting and deleting a spreadsheet cell's contents, including its formula, with a value and a formula, does not amount to overriding" a formula with a value, as required by the claim, even if Sorge is combined with Bhansali "undo" feature to make the changes temporary. The

Examiner's characterization of column 4, lines 9-37 of Sorge as "disclosing temporarily overriding the formula so that the numerical value is used instead of the formula in calculations" (Answer 11) has not been adequately explained and is not understood.

Accordingly, we reverse the Examiner's rejection of claim 18 as being unpatentable over the combination of Sorge, Zellweger, and Bhansali.

CONCLUSION OF LAW

Based on the findings of facts and analysis above, Appellant has not established that the Examiner erred in rejecting claims 1-6 and 8-16 under 35 U.S.C. § 103(a) for obviousness.

Based on the findings of facts and analysis above, Appellant has established that the Examiner erred in rejecting claims 7, 17, and 18 under 35 U.S.C. § 103(a) for obviousness.

NEW GROUND OF REJECTION

We enter the following new grounds of rejection for claims 11-17 under the provisions of 37 C.F.R. § 41.50(b):

35 U.S.C. § 101

Claims 11-17

Independent claim 11 (and associated dependent claims 12-16) and independent claim 17 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Each of these claims is directed to a computer readable medium. A computer-readable medium is directed to statutory subject matter so long as the language of claim does not read on any

disclosed non-statutory embodiments (i.e., signals, transmission mediums and the like). *See In re Nuijten*, 500 F.3d 1346, 1357 (Fed. Cir. 2007) (claim directed to a signal is not statutory under 35 U.S.C. § 101).

Here, Appellant's Specification discloses that the scope of the claimed "computer-readable medium" is intended to broadly encompass media that can take the form of "a carrier wave received from a network such as the Internet" (Spec. p. 7, l. 34 through p. 8, l. 1). Therefore, we conclude that claims 11-17 are directed to non-statutory subject matter, i.e., signals per se.

DECISION

We affirm the Examiner's decision rejecting claims 1-6 and 8-16.

We reverse the Examiner's decision rejecting claims 7, 17, and 18.

With respect to the affirmed rejection(s), 37 C.F.R. § 41.52(a)(1) provides that "Appellant may file a single request for rehearing within two months of the date of the original decision of the Board."

In addition to affirming the Examiner's rejection(s) of one or more claims, this decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). 37 C.F.R. § 41.50(b) provides that "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 C.F.R. § 41.50(b) also provides that the Appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

> (1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so

> rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .
>
> (2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

Should Appellant elects to prosecute further before the Examiner pursuant to 37 C.F.R. § 41.50(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the Examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If Appellant elects prosecution before the Examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART;
37 C.F.R. § 41.50(b)

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